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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,381	08/20/2004	On Bon Peter Chan	MTUZ 2 00016	3788
<div>James W McKee Fay Sharpe Fagan Minnich & McKee 1100 Superior Avenue 7th Floor Cleveland, OH 44114-2518</div>				
			EXAMINER	
			FIDLER, SHELBY LEE	
			ART UNIT	PAPER NUMBER
			2861	
			MAIL DATE	DELIVERY MODE
			07/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/505,381

Applicant(s)

CHAN, ON BON PETER

Examiner

Shelby Fidler

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 6-12 and 15-21 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 and 22-43 is/are allowed.
- 6) ☒ Claim(s) 13 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/30/2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Responsive Office Action

This Office Action is responsive to the amendments and remarks filed 4/30/2007.

Drawings

The replacement drawings were received on 4/30/2007. These drawings are acceptable.

Specification

The disclosure is objected to because of the following informalities: on line 17 of page 8 of the instant specification, please change "in EEPROM register temp1" to "in EEPROM to register temp1." Also, on line 30 of page 9 of the instant specification, please change "reg1 is greater than" to "reg1 is less than." These changes should be made so that the specification and drawings are in accord.

Appropriate correction is required.

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Cook (US 6155664).

Regarding claim 13:

Cook discloses an electronics module (e.g. TMP47E186M; col. 16, lines 49-52) of an intelligent ink cartridge (col. 16, lines 45-52) for use with an associated ink jet printer apparatus, the electronics module storing identification information of the ink cartridge (col. 7, lines 5-16) and ink remaining data (col. 10, line 63 – col. 11, line 4), wherein, the electronics module is a micro-controller (col. 16, lines 49-52) with embedded non-volatile memory (EEPROM 15) storing a program executable to control access and process operations of the ink remaining data in the ink cartridge for improving the maximum ink capacity utilization of the ink cartridge (col. 16, lines 52-65) by receiving ink utilization information (e.g. primary drop count) from the associated ink jet printer apparatus (step 158; col. 14, lines 35-40), adjusting the ink utilization information (step 168; col. 15, lines 4-14), and storing the adjusted ink utilization information as ink remaining data (step 168; col. 15, lines 4-14).

Regarding claim 14:

Cook also discloses that the non-volatile memory (15) is the micro-controller stores the identification information of the ink cartridge (col. 9, lines 45-47) and the program for controlling access and process operations of ink remaining data is stored in a ROM memory (col. 16, lines 60-63), so as to meet the requirement of controlling and reading/writing ink remaining data by the ink jet apparatus when the program is carried out and ink capacity of the ink cartridge is improved (col. 16, lines 65-67).

Allowable Subject Matter

Claims 1-5 and 22-43 are allowed.

Please see Office Action dated 1/31/2007 concerning reasons for allowance.

Response to Arguments

Applicant's arguments filed 4/30/2007 have been fully considered but they are not persuasive. Applicant argues, regarding claim 13, that Cook does not "receive ink utilization information from the associated ink jet printer apparatus, adjust the ink utilization information, and store the adjusted ink utilization information as ink remaining data. Examiner respectfully disagrees. As shown in the above rejection, the electronic module (e.g. TMP47E186M) disclosed by Cook is used to implement any or all of the disclosed methods for tracking ink levels (col. 16, lines 52-60). Cook shows that tracking the ink levels involves the steps of receiving an initial ink drop count (col. 14, lines 35-40), updating that ink drop count (col. 15, lines 4-14), and storing the updated ink drop count (col. 15, lines 4-14). Therefore, Cook properly discloses all claimed limitations.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until

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after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Communication with the USPTO

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelby Fidler whose telephone number is (571) 272-8455. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Luu can be reached on (571) 272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shelby Z Fidler 7/4/2007

Shelby Fidler
Patent Examiner
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MATTHEW LUU
SUPERVISORY PATENT EXAMINER